AUG 2021

ACS Enviro Epoxy HB-100

APPLIED concrete SOLUTIONS
CONSTANT PERFORMANCE

DESCRIPTION

ACS Enviro Epoxy HB-100 is a new generation self-priming, waterborne coating technology developed with the well-being of the applicator and environment in mind. It is a two pack, 100% solids, water based, low odour, low VOC epoxy coating system for internal concrete flooring. ACS Enviro Epoxy HB-100 is a robust yet flexible coating that exhibits high moisture, chemical and oil resistance with the ability to build virtually any thickness. It will provide a durable, hard-wearing coating for heavy traffic environments. ACS Enviro Epoxy HB-100 can be tinted with ACS compatible tints.

USES

ACS Enviro Epoxy HB-100 is suitable for any residential, commercial and industrial applications that require a durable, long lasting and high wear epoxy coating is required.

ADVANTAGES

- Easy-to-use 3:1 mix ratio
- Applicator and environment friendly
- Safe waterborne technology
- Low odour and low VOC
- Self-levelling and high build
- High gloss and clarity
- Durable and suitable for high traffic
- Chemical, stain and wear resistant
- No fish-eyeing or delamination with proper application
- Can be tinted to a solid colour

PACKAGING

ACS Enviro Epoxy HB-100 is available in a 10 litre, two-part kit.
Part A: 7.5 litre
Part B: 2.5 litre

COVERAGE

Typical coverage is 4-6 m² per litre per coat, two coats. Coverage may vary depending on the surface texture and porosity of the concrete being coated.

APPLICATION

Preparation

Ensure the floor to be coated is free of all efflorescence, laitance, dirt, grease, oil, paint, curing agents, dust, wax and all other contaminants. If the floor is smooth or if curing agents have been applied, mechanical grinding or abrasive blast cleaning is recommended to ensure proper adhesion. Conduct a water test before applying ACS Enviro Epoxy HB-100 by sprinkling water drops on various parts of the floor and observe how quickly they absorb into the surface.

New concrete floors should be at least 28 days old before application of ACS Enviro Epoxy HB-100. Concrete must be free of moisture before application of ACS Enviro Epoxy HB-100 (this can be tested by taping a piece of plastic over a small area and inspecting the inner surface for free moisture - refer to ASTM 4263 Plastic Sheet Test). Alternatively use a moisture meter.

Mixing

Using a mechanical mixer premix Part A until homogeneous (1-2 minutes) at low speed. If colour is required, slowly add tint pack to Part A whilst stirring with a mechanical mixer, ensuring that the sides of both containers are scraped down so that all the colour is added and there is no residue of clear epoxy on the walls of the pail and mix until homogeneous.

Allow mixed product to stand for 2-3 minutes to release any trapped air bubbles. Add Part B to the Part A/tint mix and mechanically stir for 1-2 minutes or until both parts are well blended together. Allow to stand 2-3 minutes to release any trapped air bubbles before use. Only mix as much as is likely to be used within the pot life of the product – approximately 35-45 minutes.

Do not seal or place a lid on mixed product as the heat of reaction causes pressure build up.

Application Method

Apply ACS Enviro Epoxy HB-100 with a lambswool applicator or mohair roller. If required use a spiked roller to remove any air bubbles. To provide more working time pour all the mixed product onto the floor then spread and roll until the desired film thickness is achieved.

First Coat

Apply ACS Enviro Epoxy HB-100 at a rate of 4-6m² per litre.
If a textured or anti-slip surface is required apply ACS Enviro Epoxy HB-100 at 5m² per litre and then broadcast an appropriate anti slip medium such as CCS Slip Reduction Granules. Allow 8 hours drying then remove any unbonded excess anti-slip with broom or vacuum. Ensure that all dust and any other contamination is removed thoroughly before applying the next coat to prevent fish-eyeing.

Second Coat

Apply second coat inside recoat window (8-24 hours). After 24 hours the floor may no longer accept a second coat without the possibility of fish-eyeing and subsequent delamination. If applying a second coat outside of the recommended recoat window time sanding of the surface will be required to ensure proper inter-coat adhesion. Mix and Apply ACS Enviro Epoxy HB-100 uniformly at a rate of 4-6m² using a clean bucket and mixer. Allow 24 hours cure time before subjecting the new floor to pedestrian traffic, 72 hours for vehicular traffic and 57 days before subjecting to chemicals or severe abrasion

TECHNICAL PROPERTIES

Solid	100%
Mix Ratio (v/v)	3:1
Specific Gravity	1.09 approx.
Specular Gloss 60°	90+ (5m²/litre)
Mixed viscosity 25°C	600cPs approx
Pot Life @ 20°C, 60%RH	35-45 mins approx
Drying Time @ 20°C, 60%RH	6 hours – Touch 18 hours – Traffic 7 days – Full Cure
Recoat Window	8-24 hours
Durability	Interior use only
Water resistance	Excellent
Chemical Resistance	Good resistance to acids, alkalis and most common solvents
Stain Resistance	Very Good
Abrasion Resistance	Very Good

CLEAN UP

Use CCS Solvent to wash all tools immediately following application.

OPTIONAL TOPCOATS

- CCS Armourthane
- CCS Armourguard
- CCS Decrathane
- CCS Rapid Floor Polyaspartic
- CCS FlakeKote 100S

These coatings are all high-performance scratch and abrasion resistant coatings with the additional benefits:

They contain UV absorbers which slow down the natural yellowing of epoxy floors which occurs with age and exposure to ultraviolet light, even in interior areas, thus extending service life. Various gloss levels are available from high gloss through to satin/matt.

They are also well suited for lock-in and finish coats in seamless/flake floor systems. It should be noted however: The use of these coatings still does not make the system suitable for exterior exposure as epoxy chalks readily on exterior exposure and protective coatings will eventually flake and may delaminate.

For exterior durability, users should consider Polyaspartic Coatings (refer to ACS Technical for product information).

Before applying PU coatings ensure that ACS Enviro Epoxy HB-100 is thoroughly dry (i.e. overnight) before application as they can reactivate the epoxy surface causing migration and yellowing of uncured epoxy hardener.

LIMITATIONS

Discolours and may chalk after prolonged exposure to UV sunlight – suitable for INTERIOR USE ONLY Not recommended for use below 10ºC or above 35ºC (Minimum cure temperature 10ºC) Ensure surface to be coated is dry – moisture can cause blooming, discolouration and delamination. Avoid cold and/or damp. Application should be at temperatures a minimum 5ºC above the dew point.

STORAGE

Store product between 10ºC and 30ºC away from direct sunlight. Partly used containers must be sealed tightly when not in use. For further information consult the Safety Data Sheet and read the product label carefully before use.

Safety Data Sheets are available from www.appliedconcretesolutions.com.au or by calling 1800 077 744.

USER RESPONSIBILITY-PRODUCT SELECTION AND COMPATIBILITY

ACS warrant that their manufactured product is free from defects as well as being suitable for the purpose for which it is intended as long as it has been used and applied in accordance with the most current Technical Data Sheet from ACS.

In practice, differences in materials, substrates and actual site conditions require an assessment of product suitability for the intended purpose. The user is responsible for checking the suitability of products for their intended purpose.

Further, combinations of products that form a total system are often required to service particular applications. Due to the multitude of products available to service an application, only products from the ACS system of products must be used in combination with this product to ensure it will be suitable for the purpose for which it is intended.

The product must also not be mixed or used in combination with any other product which is not a product supplied by ACS.

TOLL FREE HELPLINE: 1800 077 744
APPLIEDCONCRETESOLUTIONS.COM.AU

BRISBANE: (07) 3412 8111
SYDNEY: (02) 9677 1056

MELBOURNE: (03) 9311 9225
PERTH: 0423 023 164

Applied Concrete Solutions.
A division of River Sands Pty Ltd

14-24 Monte-Khoury Drive
Loganholme QLD 4219, Australia